

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

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REAL VIEW, LLC., )  
Plaintiff and )  
Counterclaim )  
Defendant )  
 )  
v. ) CIVIL ACTION NO. 07-12157-PBS  
 )  
20-20 TECHNOLOGIES, INC., )  
Defendant and )  
Counterclaim )  
Plaintiff )  
 )  
v. )  
 )  
BORIS ZELDIN and LEONID PERLOV, )  
Counterclaim )  
Defendants )  
 )  
 )

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**MEMORANDUM AND ORDER**

February 11, 2010

Saris, U.S.D.J.

**I. INTRODUCTION**

Plaintiff Real View, LLC ("Real View") and Defendant 20-20 Technologies, Inc. ("20-20") both sell computer-aided design ("CAD") software programs that enable consumers to model kitchens. Real View's product, ProKitchen, competes directly against 20-20 Design, which is one of the most widely used kitchen design programs in North America. On November 6, 2007, 20-20 sent Real View a cease-and-desist letter stating that Real View had engaged in a "blatant violation of its intellectual property rights," and urging Real View, among other things, to

stop "copying, manufacturing, distributing, offering for sale and selling Real View's ProKitchen software . . . ." (Compl. Ex. A.) On November 19, 2007, Real View filed a complaint against 20-20 seeking a declaratory judgment that it has not infringed 20-20's copyrights. 20-20 responded by filing a counterclaim against Real View and a third party complaint against Real View's founders, Boris Zeldin and Leonid Perlov. In its pleadings, 20-20 asserts claims of copyright infringement, trade dress infringement, unfair competition, intentional interference with advantageous relations, and violations of Massachusetts General Laws Chapter 93A. The parties agree that at the core of this case lies a copyright dispute.

Before proceeding to trial, this Court held a preliminary hearing to determine whether 20-20 Design contains expression protected by the law of copyright. See, e.g., Yankee Candle Co. v. Bridgewater Candle Co., 259 F.3d 25, 34 (1st Cir. 2001) ("The extent to which the Yankee labels contain protected expression is a matter of law, determined by the court."). Experts for each side presented tutorials: Daniel H. Abbott, an instructor at Southern Maine Community College, appeared on behalf of Real View, and Dr. Randall Davis, a Professor of Computer Science and Engineering at MIT, appeared on behalf of 20-20. Both parties agree that since the subject matter of the present dispute involves computer software, the question of copyrightability should be assessed based on the "abstraction, filtration,

comparison" test developed in Computer Associates International, Inc. v. Altai, Inc., 982 F.2d 693, 706-11 (2d Cir. 1992). It now falls to this Court to perform the necessary "filtration." See Harbor Software, Inc. v. Applied Systems, Inc., 925 F. Supp. 1042, 1046 (S.D.N.Y. 1996) ("[F]iltration analysis is a matter of law for the Court, rather than for the jury."). In essence, the Court concludes that the screen display and graphical user interface, including the dialog boxes, are protectable as a compilation, but filters out the remaining items as unprotectable.

## II. DISCUSSION

### A. Legal Framework

By now it is well settled that both the literal and non-literal elements of a computer program are protected by the law of copyright. See Altai, 982 F.2d at 702; Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1249 (3d Cir. 1983) ("[A] computer program . . . is a "literary work" and is protected from unauthorized copying . . . ."); 17 U.S.C. § 101 (defining "computer program"). Nevertheless, the application of copyright law to the domain of computers has been extremely difficult. See Lotus Dev. Corp. v. Borland Int'l, Inc., 49 F.3d 807, 820 (1st Cir. 1995) (Boudin, J., concurring) ("Applying copyright law to computer programs is like assembling a jigsaw puzzle whose pieces do not quite fit."); 4 Melville B. Nimmer and

David Nimmer, Nimmer on Copyright § 13.03 [E] [4], [F] (Matthew Bender, Rev. Ed.) (explaining that computer programs pose a "special challenge" and noting that "evaluating the similarity between two computer programs is often exceedingly difficult"). For present purposes, the difficulty lies not in assessing the similarities between rival computer programs, but in determining whether certain aspects of 20-20 Design fall into the range of protectable expression.

To prevail on a suit for copyright infringement, a party must prove not only that its intellectual property was copied, but also that the copying at issue is actionable. See Mag Jewelry Co. v. Cherokee, Inc., 496 F.3d 108, 115 (1st Cir. 2007); Stillman v. Leo Burnett Co., 720 F. Supp. 1353, 1357 (N.D. Ill. 1989) ("If a defendant has not copied something protected by the copyright laws -- specifically, the plaintiff's expression of his ideas -- then his copying will not subject him to liability."). One need not have 20/20 vision to see that ProKitchen and 20-20 Design share remarkable similarities. Indeed, Real View appears to concede the matter of factual copying: the company admits that while developing its ProKitchen product, it downloaded a copy of 20-20 Design. (Pl.'s Pretrial Mem. 4 (Docket No. 53).) Further, Real View explains that "it made ProKitchen as close to 20-20 Design as possible." (Pl.'s Pretrial Mem. 12.)

"Not all copying, however, is copyright infringement."

Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 361 (1991). As early as 1880, the Supreme Court described the dichotomy between ideas - "the province of letters-patent" - and their expression - "the subject of copyright". Baker v. Selden, 101 U.S. 99, 102 (1880). The fundamental distinction between idea and expression applies with full force in the context of computer programs. See H.R. Rep. No. 1476 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5667 (extending copyright protection to computer programs "to the extent that they incorporate authorship in the programmer's expression of original ideas, as distinguished from ideas themselves").

Section 102 provides that copyright protection does not extend to "any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." 17 U.S.C. § 102(b). Nor does copyright protection extend to matters taken from the public domain. 3 Nimmer on Copyright § 9A.01 ("the term ['public domain'] connotes the opposite of legal protection"). The doctrines of merger and scenes a faire also limit the amount of protectable expression contained in a computer program. See Lexmark Int'l, Inc. v. Static Control Components, Inc., 387 F.3d 522, 535-36 (6th Cir. 2004).

Under the doctrine of merger, when there are a limited number of ways in which an idea can be expressed, the idea is

said to "merge" with its expression, and the expression becomes uncopyrightable. This is based on the recognition that,

When the uncopyrightable subject matter is very narrow, so that the topic necessarily requires, if not only one form of expression, at best only a limited number, to permit copyrighting would mean that a party or parties, by copyrighting a mere handful of forms, could exhaust all possibilities of future use of the substance.

Morrissey v. Procter & Gamble Co., 379 F.2d 675, 678 (1st Cir. 1967) (internal citations and punctuation omitted). Therefore, "[w]hen there is essentially only one way to express an idea, the idea and its expression are inseparable and copyright is no bar to copying that expression." Concrete Machinery Co. v. Classic Lawn Ornaments, Inc., 843 F.2d 600, 606 (1st Cir. 1988). For example, the First Circuit found merger where there were a "sharply limited" number of ways to depict fruits and flowers on labels indicating the scent of candles. Yankee Candle Co. v. Bridgewater Candle Co., 259 F.3d 25, 36 (1st Cir. 2001). "In general, the merger doctrine is most applicable where the idea and the expression are of items found in nature, or are found commonly in everyday life." Id.

The doctrine of scenes a faire also removes creative expression from the protection of copyright. It "denies copyright protection to elements of a work that are for all practical purposes indispensable, or at least customary, in the treatment of a given subject matter." Coquico, Inc. v. Rodriguez-Miranda, 562 F.3d 62, 68 (1st Cir. 2009). As the

Seventh Circuit has stated, "the doctrine teaches that a copyright owner can't prove infringement by pointing to features of his work that are found in the defendant's work as well but that are so rudimentary, commonplace, standard, or unavoidable that they do not serve to distinguish one work within a class of works from another." Gaiman v. McFarlane, 360 F.3d 644, 659 (7th Cir. 2004) (internal citation and punctuation omitted). In a literary work, the scenes a faire doctrine acts to shield from copyright protection "stock characters" such as "a drunken old bum," "a gesticulating Frenchman," or "a fire-breathing dragon." Id. at 660. In the context of computer programs, it removes from copyright certain "structural components . . . required by factors external to the program itself." Altai, 982 F.2d at 707. This is due to the recognition that "it is virtually impossible to write a program to perform particular functions in a specific computing environment without employing standard techniques." 4 Nimmer on Copyright § 13.03[F][3]. Thus, the Court can filter based on hardware standards, software standards, computer manufacturers' design standards, target industry practices, and computer industry programming practices. Id.

Although a work may contain numerous unprotectable elements, the work may still be entitled to copyright protection as a compilation. Section 103 of the Copyright Act expressly provides protection to a "compilation," defined as "a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship." 17 U.S.C. § 101. To be sure, a compilation copyright is "thin," Feist, 499 U.S. at 349, and therefore "protects against only virtually identical copying." Satava v. Lowry, 323 F.3d 805 (9th Cir. 2003). In addition, the compilation must reflect a requisite degree of originality. See Feist, 499 U.S. at 348.

In Feist, the Supreme Court set a low threshold for originality: "Originality requires only that the author make the selection or arrangement independently (i.e., without copying that selection or arrangement from another work), and that it display some minimal level of creativity." 499 U.S. at 358. After noting that the "vast majority" of compilation works contain the requisite originality, the Court described the types of works so wanting in originality as to be unprotected by copyright: "There remains a narrow category of works in which the creative spark is utterly lacking or so trivial as to be virtually nonexistent." Id. at 359.

Finally, for the purposes of assessing the copyrightability

of certain elements of 20-20 Design, it is necessary to briefly describe two cases that help provide an analytical framework for the present analysis. In 1984, Altai, Inc. hired a computer programmer who worked at Computer Associates ("CA") to help modify an existing Altai program. Altai, 982 F.2d at 699-700. When the employee left CA, he took the source code of a similar CA program with him, and ultimately incorporated it verbatim into Altai's product. Id. at 700. Altai did not challenge the inevitable conclusion of the District Court that it was liable for copying CA's program. Id. at 701. After discovering the copying, Altai excised the copied portion of its source code and asked eight new programmers to rewrite the application. Id. at 700. The difficult question for the courts was whether the new version of Altai's program infringed CA's copyright: even though the Altai program no longer contained any literal copying from the CA program, CA argued that the program's structure remained essentially the same. Id. at 702.

In assessing whether and to what extent the non-literal copying<sup>1</sup> of a computer program could constitute copyright infringement, the Second Circuit relied on traditional copyright law to develop what has become known as the "abstraction-filtration-comparison" test. In the abstraction phase,

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<sup>1</sup> The First Circuit has defined non-literal copying as "copying that is paraphrased or loosely paraphrased rather than word for word." Lotus, 49 F.3d at 814.

"[i]nitially, in a manner that resembles reverse engineering on a theoretical plane, a court should dissect the allegedly copied program's structure and isolate each level of abstraction contained within it. This process begins with the code and ends with an articulation of the program's ultimate function." Id. at 707.

Next, the court undertakes a "successive filtering method for separating protectable expression from non-protectable material," in which the court examines "the structural components at each level of abstraction to determine whether their particular inclusion at that level was 'idea' or was dictated by considerations of efficiency, so as to be necessarily incidental to that idea; required by factors external to the program itself; or taken from the public domain . . . ." Id. (internal citations and punctuation omitted). At this stage of analysis, a court should filter out elements of the program based on the doctrines of merger and scenes a faire. See id. at 707-710. Finally, after whittling down the total amount of original expression to a "golden nugget," "a core of protectable expression" remains, and the question becomes the importance of the protected expression in relation to the overall program and whether the alleged infringer copied any of that protectable portion. Id. at 710.

Three years after the Altai decision, the First Circuit took up the question of whether a "menu command hierarchy" is copyrightable subject matter. Lotus, 49 F.3d at 813. The Lotus court expressly declined to apply the test developed in Altai, reasoning that a test designed to assess nonliteral copying of computer code would be "of little help in assessing whether the literal copying of a menu command hierarchy constitutes copyright infringement." Id. at 815. The Lotus court also expressed concern that the abstraction process might "obscur[e] the more fundamental question of whether a menu command hierarchy can be copyrighted at all." Id.

Instead of undertaking an Altai analysis, the First Circuit applied § 102(b), and concluded that the menu command hierarchy was uncopyrightable because it constituted a "method of operation." Id. at 815. The menu command hierarchy refers to the 469 commands such as "Copy," "Print," and "Quit," that were arranged into 50 menus and submenus. Id. at 809. To operate Lotus's software, a user would choose commands either by highlighting them on the screen or typing their first letter. Id. Although Borland did not copy any Lotus source code, it exactly replicated the Lotus menu command hierarchy in its rival spreadsheet program. Id. at 810.

In holding that the menu command hierarchy qualified as a "method of operation" under § 102(b), the First Circuit defined "method of operation" as "the means by which a person operates

something, whether it be a car, a food processor, or a computer." Id. at 815. Since the Lotus menu command hierarchy provided "the means by which users control and operate Lotus 1-2-3," it was unprotectable despite the fact that the Lotus developers "made some expressive choices in choosing and arranging the Lotus command terms." Id. at 815, 816. For illustrative purposes, the Lotus court analogized the menu command hierarchy to "the buttons used to control . . . a video cassette recorder ("VCR")." Id. at 817. The buttons on the VCR cause the device to record, play, reverse, fast forward, pause, and so on. Similarly, the menu command hierarchy in the Lotus program causes the application to undertake particular functions.

Just as in Lotus and Altai, Real View is not alleged to have purloined the source or object code from 20-20 Design. Nevertheless, 20-20 alleges that Real View copied fifty-four elements of its program. 20-20 insists that each of these elements survives a "filtration" analysis; Real View retorts that not a single one constitutes protectable expression. Since 20-20 has offered a list of specifically protected elements, this Court need not engage in the abstraction process described in Altai and eschewed in Lotus. See MiTek Holdings v. Arce Eng'g Co., 89 F.3d 1548, 1555 (11th Cir. 1996) ("[I]f the copyright holder presents the court with a list of features that it believes to be protectable . . . , the court need not abstract further such features."); ILOG, Inc. v. Bell Logic, 181 F. Supp. 2d 3, 11 (D.

Mass. 2002) (declining to "abstract" and proceeding to "filter" when parties identified elements of a computer program that were allegedly copied). Nevertheless, sitting in a Lotus position, the Court must read Altai through the lens of Lotus and thus filter out elements based on § 102(b) before filtering on the basis of merger, scenes a faire, or public domain.

**B. Element-by-Element Analysis**

On July 21, 2009, 20-20 submitted a revised, numbered list of alleged similarities between its program and ProKitchen. (Docket No. 60.) The Court will consider whether each alleged item constitutes protectable expression as a matter of copyright law.

**1. Item 1: Appearance of the overall layout of the screen, overall layout and presentation of information and icons (user interface)**

At the outset, 20-20 asserts that the basic screen that a user confronts upon opening 20-20 Design and ProKitchen is protectable by copyright. "[G]raphical user interface visual works are subject to the same process of analytical dissection as are other works." Apple Computer Inc. v. Microsoft Corp., 35 F.3d 1435, 1445 (9th Cir. 1994). It is important to point out that neither Altai nor Lotus directly considered the copyrightability of screen displays. The Second Circuit suggested that "certain types of screen displays" would "fall under the copyright rubric of audiovisual works," and "may be

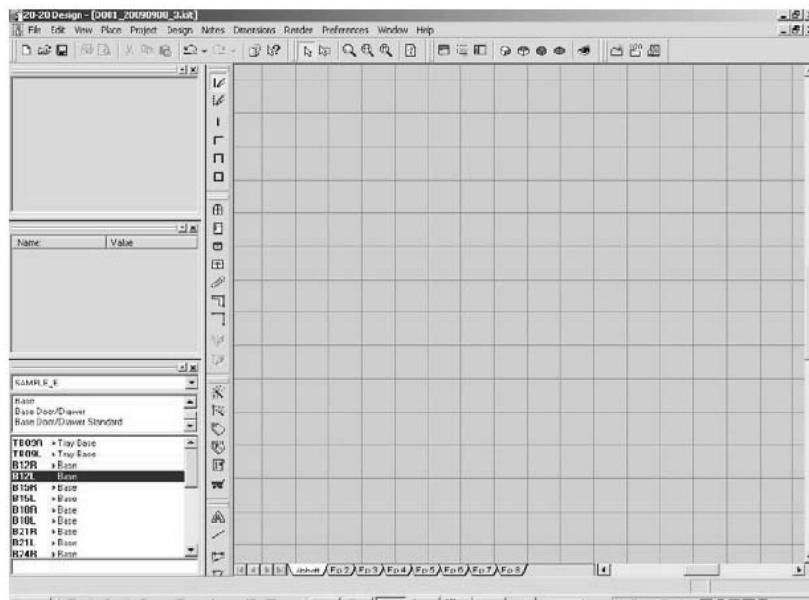
protectable regardless of the underlying program's copyright status." Altai, 982 F.2d at 703. The First Circuit observed that "users need not 'use' any expressive aspects of the screen displays in order to operate Lotus 1-2-3; because the way the screens look has little bearing on how users control the program, the screen displays are not part of Lotus 1-2-3's 'method of operation.'" Lotus, 49 F.3d at 816. The Lotus court took no position on "whether Lotus 1-2-3's screen displays constitute original expression capable of being copyrighted." Id. at 816 n.10. As such, the appearance of the screen is not a "method of operation" as that term has been defined by the First Circuit.

While the screen display provides the metaphorical drafting paper on which a user may render images of kitchen designs, the screen display itself - as a configuration with independent aesthetic value - does not represent "the means by which a person operates something." Lotus, 49 F.3d at 815. It is a place with expressive elements and not the functional analog to a button. While none of the other § 102(b) factors applies to preclude the screen display from the protection of copyright, nevertheless, many aspects of the screen display may be filtered out on the basis of the doctrines of merger and scenes à faire. As the leading commentator explains, computer programs will frequently share similarities as a result of constraints imposed by the common hardware on which the programs run, the software environment in which the programs operate, computer

manufacturers' design standards, target industry practices, and computer industry programming practices. 3 Nimmer on Copyright § 13.03 [F] [3].

Real View aggressively argues that nearly every aspect of the 20-20 Design screen display should be filtered out. Before the merits of these arguments can be considered, it is necessary to briefly describe the screen display at issue. Upon launching the 20-20 Design application, a user will see a default screen that appears as follows. See 20-20 Ex. 3 at 5<sup>2</sup>; Real View App. 4.

The vast majority of the screen display consists of a large gray grid workspace occupying the right portion of the screen. Id. A row of icons (or "horizontal tool bar") sits immediately




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<sup>2</sup> This citation is to Exhibit 3, introduced by 20-20 at the evidentiary hearing. It includes screen shots of each of the 54 elements at issue.

above the grid, and a column of icons (or "vertical tool bar") lies to the immediate left of the grid. Id. To the right of the grid is a vertical scroll-bar, and at the bottom of the grid are multiple tabs. Id. The left side of the screen consists of a series of boxes (or "sidebar") that, from top to bottom, are called the information box, edit box, hierarchical catalog box, drag and drop list, and search box. Id. Finally, a row of menu command categories (from "File" to "Help") is positioned across the top of the screen. Id.

When considered in isolation, Real View is correct to suggest that most of these elements should be filtered out. Many of the icons at issue are "standard Microsoft Windows icons" or "industry-standard" icons used routinely in CAD software. (Real View Br. 19.) It is also standard for CAD software to feature screen displays dominated by large work areas that may contain grids. See MiTek, 89 F.3d at 1557 n.20 ("The look of the ACES program is basically industry standard for computer aided-design ("CAD") programs, with the menu bars running across the top and the right, and the large work area occupying most of the screen."). (See also 20-20 Ex. 3 at 5 (Chief Architect).) Further, there are very few locations on the screen that could accommodate the horizontal and vertical toolbars: the horizontal toolbar could only be placed above or below the work area, and the vertical tool bar could be placed to the right of the work area or on either the right or left side of the hierarchy of

boxes. The doctrine of merger would therefore dictate that this Court filter out any claim of copyrightability based on the position of the toolbars. See Productivity Software Int'l v. Healthcare Techs., Inc., No. 93-6949, 1995 U.S. Dist. LEXIS 10381, at \*15 (S.D.N.Y. July 24, 1995) ("[T]here are only two locations where a menu bar may be logically placed on a computer screen, the top and the bottom . . . . The limited alternatives available do not permit Plaintiff to claim copyright protection for its placement of the menu bar.").

The doctrines of merger and scenes a faire also preclude a finding of copyrightability with respect to the function and location of the hierarchy of boxes in the side bar. 20-20's own exhibit indicates that the screen displays of both Chief Architect and Planit contain similar stacks of boxes on one side of the screen. Since most of the screens are filled by the work area, the stacked boxes could only be positioned to the left or right of the work area. Thus merger denies copyright protection to 20-20's decision to position the boxes to the left of the work area. Moreover, since CAD software containing a sales component typically includes a product selection box (or boxes) along with a box that illustrates the item a user wishes to place in the kitchen, these features fall within the scenes a faire doctrine. (See Real View App. 7, 11-15.)

This analysis, however, proves too much. Both the case law and the leading commentary warn against losing sight of the

forest for the trees. See, e.g., Nimmer on Copyright § 13.03 ("In performing the filtering . . . the analysis should not proceed mechanically simply by isolating physical elements out of the copyrightable work."); id. ("Although each geometric form in isolation might be subject to exclusion from the court's calculus, the conceptual interrelationship of shapes should remain present for the court's analysis even after filtering out particular concrete objects, thus subjecting the defendant to potential liability should copying of those elements be proven."); Arnstein v. Porter, 154 F.2d 464, 477 (2d Cir. 1946) (Clark, J., dissenting) ("It is as though we found Shakespeare a plagiarist on the basis of his use of articles, pronouns, prepositions, and adjectives also used by others."); Boisson v. Banian, Ltd., 273 F.3d 262, 272 (2d Cir. 2001) ("[A] court is not to dissect the works at issue into separate components and compare only the copyrightable elements. To do so would . . . result in almost nothing being copyrightable because original works broken down into their composite parts would usually be little more than basic unprotectible elements like letters, colors and symbols.") (internal citation omitted). The fact that each individual icon or feature on a screen cannot necessarily be copyrighted does not deny the screen itself, as the sum of those icons or features, copyright protection. Thus the critical question becomes whether the screen display and graphical user interface are protectable as a compilation: whether the selection

and arrangement of the icons, the layouts of the windows on the screen, and the dialog boxes which comprise the graphical user interface are themselves protectable as expression.

In most cases, while the constituent elements of the user interface or screen display are not independently protectable, the user interface is protectable as a compilation with respect to its "unique selection and arrangement of all these features."

See Apple Computer Inc. v. Microsoft Corporation, 35 F.3d 1435, 1446 (9th Cir. 1994); Mitek Holdings, Inc. v. Arce Eng'g Co. Inc., 89 F.3d 1548, 1554 (11th Cir. 1996) (holding that "a user interface, here a screen display (itself an audiovisual work), may be entitled to copyright protection as a compilation."); Engineering Dynamics, Inc. v. Structural Software, Inc., 26 F.3d 1135, 1346 (holding screen displays and input-output formats copyrightable and noting that their selection and arrangement contained enough originality under Feist to warrant protection). Cf. Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348 (1991) ("[A] directory that contains absolutely no protectible written expression, only facts, meets the constitutional minimum for copyright protection if it features an original selection or arrangement."). For example, one court protected the screen display, including the coordination, selection, and arrangement of fields, as a compilation even though the individual elements within the screen were unprotectable as unoriginal. See O.P. Solutions, Inc. v.



Intellectual Prop. Network, Ltd., No. 96-7952, 1999 WL 47191, at \*11-12, 20 (S.D.N.Y. Feb. 2, 1999).

The inquiry must then turn to whether the screen display and user interface of 20-20 Design exhibit sufficient originality to be protectable under Feist. They do. The creators of 20-20 made numerous creative and expressive choices in developing the screen display and user interface. 20-20 selected certain functions to be represented by icons; certain icons to be represented in certain toolbars; certain toolbars to occupy certain spaces; and certain features to be housed in certain boxes stacked in a particular order. These may not have been decisions with much artistic sizzle, but they contain sufficient originality so that the screen display is copyrightable as a compilation.

**2. Item 2: Sequence of sub-windows on the left side of the screen: information box, edit box, hierarchical catalog box, drag and drop listing, and search box.**

20-20 asks this Court to rule on whether the "sequence of sub-windows" on the left side of the screen is protectable by copyright. (Image below.) At the evidentiary hearing, 20-20 emphasized the specific order in which the boxes were arranged. (See Tr. Day 2 at 97:4-10.) Real View argues that the sequence of sub-windows lacks sufficient originality to be protected by copyright. "When it comes to the selection or arrangement of information, creativity inheres in making non-obvious choices

from among more than a few options." Matthew Bender & Co. v. West Publ'g Co., 158 F.3d 674, 682 (2d Cir. 1998). As noted above, several other CAD programs contain similar arrangements of vertically stacked boxes that perform the same or similar functions as the 20-20 Design boxes. Here, as 20-20 faced relatively few options for the sequence, its choice of options is barred under the doctrine of merger or, alternatively, for lacking the requisite spark of originality. The boxes may only be protected to the extent that they comprise part of the screen display or user interface.

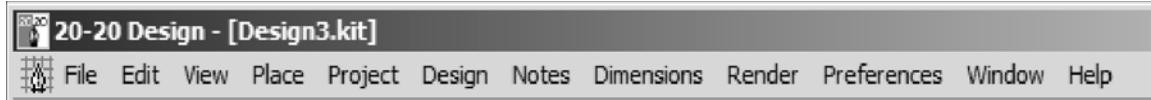
**3. Items Unprotectable Under Lotus as Methods of Operation: Elements 3-5, 11-15, 18-28, 30-47, 49-50, 54.**

20-20 asserts that Real View copied numerous elements of its computer program. The majority of these elements are not protectable based on the definition of "method of operation." I briefly describe each of those elements below, and identify why each is not copyrightable.

**a. Items 3-5**

20-20 claims protection for elements 3, 4, 5, and 24, which are directly analogous to the menu command hierarchy at issue in Lotus. As explained above, that menu command hierarchy - despite incorporating creative expression - was ruled a "method of operation" under § 102(b) because it "provides the means by which users control and operate Lotus 1-2-3." Lotus, 49 F.3d at 815.

Similarly, the various toolbars along with the "main set of actions" along the top of the screen provide the means by which users control and operate 20-20 Design.



(Item 4)



(Item 5)

There can be little doubt that these aspects of 20-20 are "methods of operation" under § 102(b). Describing the menu command hierarchy at issue in Lotus, the First Circuit explained, "If users wish to copy material, for example, they use the "Copy" command. If users wish to print material, they use the "Print" command." Lotus, 49 F.3d at 815. Similarly, if users of 20-20 wish to draw a wall, they click the "Draw Walls" icon on the vertical toolbar. (20-20 Ex. 3 at 5.) Even more directly on point, if users of 20-20 wish to copy material, they press the "Copy" icon on the horizontal toolbar, and if they wish to print, they press the "Print" icon. (20-20 Ex. 3 at 8.)

To the extent that 20-20 seeks to protect the "selection, arrangement, and appearance of icons," the "selection and arrangement in the main set of actions," and the "selection and ordering of commands" (items 3-5), those arguments are also foreclosed by Lotus as well as the doctrines of merger and scenes a faire. The First Circuit deemed it irrelevant that the menu

items in Lotus could be arranged in alternative manners: "The 'expressive' choices of what to name the command terms and how to arrange them do not magically change the uncopyrightable menu command hierarchy into copyrightable subject matter." Lotus, 49 F.3d at 816. Thus, 20-20's selection and arrangement of functional icons or menu headings ("Place," "Notes," "Dimensions") are not entitled to copyright protection.

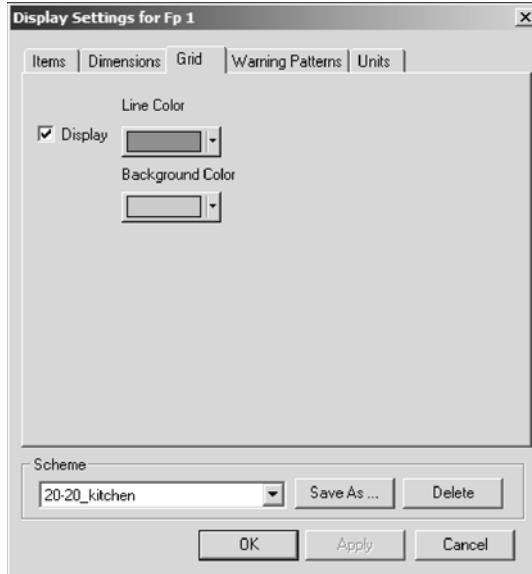
As to the appearance of the vertical set of icons (part of item 3), these are similarly filtered out of consideration on grounds of merger and scenes a faire. Lotus suggests that the appearance of the icons is not protectable; having concluded that the icons themselves are part of a method of operation, "what to name the command terms" – textually or graphically – makes no difference. See Lotus, 49 F.3d at 816. Without discussing each of the 19 icons, it suffices to say that there are either so few ways of expressing each idea that 20-20 is not entitled to rights in the particular expression they selected, or the icon is standard in the computing universe. Thus, for example, the vertical toolbar contains a set of "room shape" icons: by pressing a button, a user may select an "L-Shape," "U-Shape," or "Closed Room" wall layout. The icon on the L-Shape wall layout button is simply a rotated "L"; the icon on the U-Shape wall layout button is simply an upside-down "U" with three sides at 90-degree angles to each other; the icon on the "Closed Room" wall layout button is a square. There are only so many ways to

illustrate the idea of "L-shaped" or "U-shaped" walls and a "closed" room. Thus, the idea of having an icon to illustrate a button that can create a closed room, for example, merges with its expression (the square). As 20-20's expert conceded, "Okay, fair enough, so perhaps the square merges." (Tr. Day 1, 60:6-7.) See also Atari Games Corp. v. Oman, 979 F.2d 242, 247 (D.C. Cir. 1992) ("We do not in any way question the Register's position that 'simple geometric shapes and coloring alone are *per se* not copyrightable.'"). Other icons are also commonly used in computing and thus filtered out under the doctrine of scenes a faire; the pencil tool is just one example. (See Real View App. 41.)

20-20's argument that the idea of including icons capable of drawing walls somehow entitles those icons to copyright protection is fallacious: regardless of the novelty of the idea, if the idea may only be expressed in a particular manner, copyright protection is foreclosed.

b. **Items 11-14: the display settings box (dialog boxes)**

According to 20-20, "[N]o other programs utilize dialog boxes so similar in type, appearance and layout as do these two programs." (20-20 Br. 19 (emphasis in original).) While this may be true, Real View correctly characterizes these dialog boxes as containing items "used to operate and control the computer."



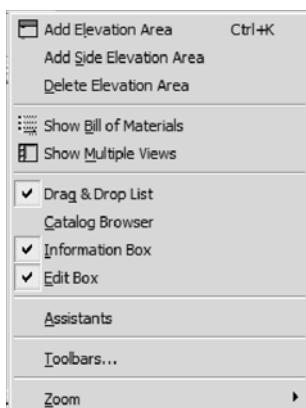
(Real View Br. 41.) To take the easiest example, it is possible to change the color of the grid that dominates the screen display by clicking on a tab that bears the word "Grid" and then selecting a color from a drop-down list. (20-20 Ex. 3, 15.) The dialog boxes, though perhaps not a menu command hierarchy, contain "the means by which users control and operate" the program. Lotus, 49 F.3d at 815. While the items in the various dialog boxes are methods of operation, to the extent that the dialog boxes are considered part of the graphical user interface discussed in item one, they are protectable as part of a compilation in the work as a whole.

**c. Item 15: similarity of expression in the file actions: save as image**

20-20 claims that the "Save As Image" command, located under the "File" heading at the top left of the screen, should be afforded copyright protection. The "Save As Image" function is located within a menu command hierarchy, and is unprotectable as a "method of operation" under Lotus: to save a "photo" of the design, you click the "Save As Image" button.

**d. Items 18-22**

Like every other computer program, a row of command categories sits across the top of the screen display. From left to right, the commands are: File, Edit, View, Place, Project, Design, Notes, Dimensions, Render, Preferences, Window, and Help. (Real View App. 4.) When a user clicks on one of those command categories, a list of options appears that a user can then click on in order to make something happen. For example, to add an



elevation area, a user would click "View" and then select "Add Elevation Area" from the menu. The program would then add an elevation area. These command categories are exactly analogous to the menu command hierarchy described in Lotus, and are therefore not protected by copyright.

20-20 also seeks to protect the expression associated with the function of adding a "note" and tagging it with a number.

To write a note, a user clicks on the Notes command category and selects a command called "Add Note." (20-20 Ex. 3, 22.) A dialog box then appears containing a large space for the user to type in a note as well as a small space in which the user may "tag" the note with a number. (Id.) After writing the note and associating it with a number, the user can click an "OK" button and the process will be complete. Once again, this is almost entirely functional, contains marginal original expression, and is ultimately a method of operation. To the extent that 20-20 seeks to protect the dialog box in which a user can type a note, that dialog box is unprotectable as a blank form. See Ross, Brovins & Oehmke, P.C. v. Lexis/Nexis, 348 F. Supp. 2d 845, 860 (E.D. Mich. 2004) ("Blank forms are not copyrightable, and the dialog boxes are themselves small blank forms."), aff'd in relevant part on other grounds, 463 F.3d 478 (6th Cir. 2006).

**e. Item 23**

20-20 seeks to protect the "three methods to add a wall." (Item 23.) One of the three "methods" consists of using a menu command function and another consists of pressing a button on a toolbar. The "methods" of adding a wall are unprotectable methods of operation.

**f. Items 25 & 26: Items Associated with Mouse Clicks**

20-20 seeks to protect two "creative and original" uses of mouse clicks: an "idiosyncratic" sequence of mouse clicks used to

draw walls, and the ability to terminate a wall sequence through a single left mouse click behind the most recent wall drawn. (20-20 Br. 21.) The "idiosyncratic" sequence of mouse clicks operates as follows: "A right mouse click allows the user to change the orientation of the wall without changing the length; another right mouse click allows the user to change only the length; a right mouse click again allows changing the orientation again." (20-20 Br. 23.) In support of its claim, 20-20 points to its expert's testimony that the specific mouse click sequences at issue represent an "obscure choice," and complains that "Real View had limitless options for its wall drawing feature in ProKitchen, but instead chose the exact sequence of mouse clicks found in 20-20 Design." (20-20 Br. 23-24.) The question is not whether Real View copied 20-20's program, but rather whether Real View copied protectable expression. The novelty of 20-20's sequence of mouse clicks is irrelevant if the sequence of mouse clicks is unprotectable in the first place.

The question is whether a series of clicks constitutes a "procedure, process, system" or "method of operation" under § 102(b). Real View argues that copyright does not protect a series of mouse clicks that perform various functions relating to wall drawing in CAD software. 20-20 attempts to distinguish the mouse clicks from Lotus by characterizing the sequence of mouse clicks as "*dynamic in use.*" (20-20 Br. 21.) Yet the fact that

the function performed by the mouse clicks varies depending on when and how many times the mouse is clicked does not prevent the mouse clicks from being the "means by which a person operates something." Lotus, 49 F.3d at 815. The mouse clicks are precisely the means by which the user can modify the walls of a drawing.

The case law, while not directly on point, tends to support denying copyright protection to mouse clicks. One court held that the process of double-clicking an icon to open various "reference windows" constituted "a process or method of operation." O.P. Solutions, Inc., 1999 WL 47191, at \*19. To be sure, double-clicking an icon to open a folder has become a standard programming feature, whereas the mouse clicks at issue are not standard. However, the mouse clicks at issue remain the means by which a user operates the program. Moreover, it is difficult to identify a distinction between the idea of using mouse clicks to draw walls and the expression of that idea. Cf. Apple Computer, Inc. v. Microsoft Corp., 759 F. Supp. 1444, 1452 (N.D. Cal. 1991) ("[T]he use of a mouse to move icons around on a screen appear[s] to be [an] idea[] .").

20-20 relies on Mitek Holdings, Inc. v. Arce Engineering Co., 864 F. Supp. 1568, 1581 (S.D. Fla. 1994), which held that a mouse click contained "a high degree of originality" so as to warrant copyright protection. In Mitek, the court analyzed the copyrightability of a computer layout program that provided

architectural blueprints indicating the size and location of wood trusses on the walls of a structure.<sup>3</sup> 864 F. Supp. at 1572. One element of the program at issue in Mitek allowed the user to right-click the mouse to indicate that a distance was a number of feet and zero inches or zero sixteenths of an inch. Id. at 1581. In other words, instead of manually pressing the zero button or clicking on a pop-up number pad to indicate the distance of zero inches, the user could simply right-click. Id. The District Court devoted only two sentences to considering the copyrightability of this element. See id. While the Mitek court found the mouse clicks "original enough to warrant copyright protection," the court did not expressly consider whether the "method" of entering distances was unprotectable under § 102(b).

For all of the foregoing reasons, 20-20's series of mouse-clicks, however original and idiosyncratic, is not entitled to copyright protection because it is a method of operation under section 102(b).

**g. Items 27 & 28: creating walls using the edit box and using default room configurations (L-shaped, U-shaped, closed)**

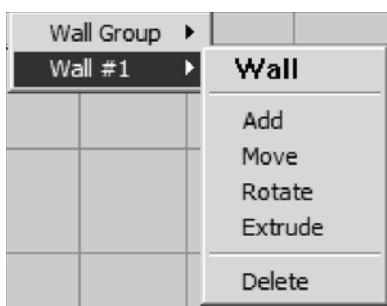
With respect to elements 27 and 28, 20-20 describes the alleged "expression" as "creating walls using the Edit Box" and "creating walls using the default room configurations (L, U, closed)." (20-20 Ex. 3, 28.) 20-20 appears to be describing two

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<sup>3</sup> A wood truss is a group of beams that support a roof.

different methods for creating walls: using the "edit box," a user may enter the length and angle of a wall, and using the default room configuration buttons, a user may create walls that are L-shaped, U-shaped, or closed. Again, these are unprotectable methods of operation.

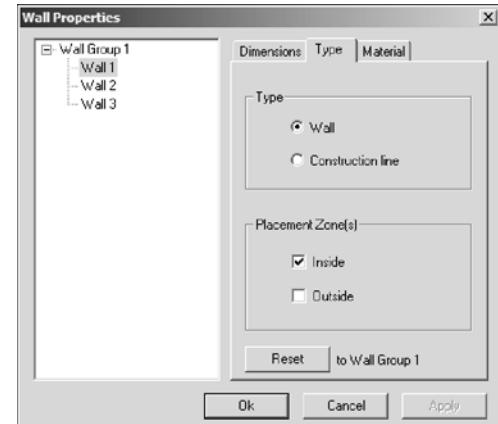
**h. Items 30-38: Modifying Walls and Details of Walls**



Elements 30-34 refer to a submenu that allows a user to move, rotate, extrude (indent), and delete a wall. 20-20 apparently seeks to protect the order of the items in the submenu, and the submenu's placement within its parent menu. As explained above, this is directly analogous to the menu command hierarchy that the First Circuit held to be an uncopyrightable method of operation in Lotus. For example, to rotate a wall, the user must navigate the menu and submenu until she finds the "Rotate" command. Letting go of the mouse while the cursor is positioned on the term "Rotate" will result in the rotation of the wall. The menu provides the means by which a user operates the software: it is a method of operation.

Elements 35-38 relate to a dialog box and features contained within it that allow a user to change a wall to something called a "construction line," move, add, and remove a placement zone, and change the thickness and height of a wall. All of these

things are expressed within a dialog box that contains buttons and blank fields. Again, except to the extent that they are part of the graphical user interface or screen display compilation, these are unprotectable methods of operation. Clicking on



different commands in the dialog box makes things happen. Thus, to create a placement zone "inside" a wall, a user checks a box that says "Inside"; to create a placement zone "outside" a wall, a user checks a box that says "Outside." (20-20 Ex. 3, 39.) The dialog box provides the means by which the program functions. It is of no import that 20-20 chose to situate functions within a dialog box instead of a menu command hierarchy; either way, other than as part of the compilation, 20-20's expression of the means by which a user can modify the appearance of a wall or a placement zone is an unprotectable method of operation.

#### i. **Items 39-46**

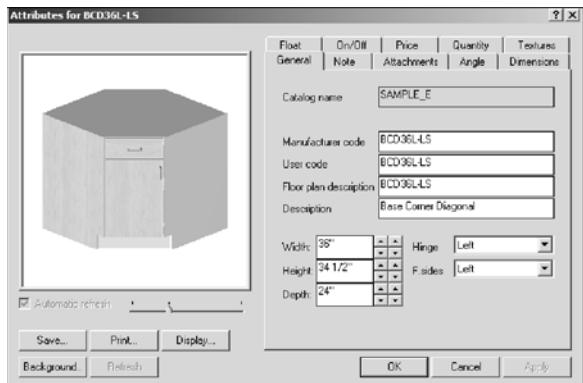
In item 39, 20-20 seeks to protect four different means of placing kitchen design components. Item 40 describes the process or means by which a user can place an item in the design: she can select an item (such as a cabinet) from a list and then click a button labeled "Place," and then click on a spot in the floor plan to place the item. (20-20 Ex. 3, 46.) Item 41 describes

the process of dragging an item from a list and dropping it onto the design. (20-20 Ex. 3, 47.) All of these methods of operation are unprotectable by copyright. Moreover, the "drag and drop" procedure is a standard computing operation, and thus unprotectable under the doctrine of scenes a faire.

Taken together, items 42 through 46 describe the "details of item placement." (20-20 Ex. 3, 50.) For example, it is possible to place an item in a particular location by typing in that location's coordinates. Typing in the coordinates is the means by which the object is placed in a particular spot. Because each of these elements relates to how the user can do certain things involved in placing a kitchen design component, each is therefore a method of operation.

**j. Item 47**

20-20 seeks to protect a dialog box that enables users to specify characteristics of kitchen items placed into a design. (20-20 Ex. 3, 52.) For example, the user can click on arrows to increase or decrease the width, height, and depth of a cabinet. The dialog box essentially consists of several tabs ("Dimensions," "Price," "Quantity," etc.) and provides information in a series of fields ("Catalog name," "User code," "Width," etc.). 20-20 highlights its "hundreds if not thousands of expressive choices in the appearance, content and layout of



the dialog boxes." (20-20 Br.

18.)

Here, the dialog box at issue is different from the menu command hierarchy considered in Lotus.

Part of the box's usefulness is

derived from the fact that it provides information, including a "preview" of a kitchen design component, its SKU number, and other identifying characteristics. (See 20-20 Ex. 3, 52; see also 20-20 Br. 20.) The menu command hierarchy in Lotus was entirely functional and did not independently provide visual or factual information. Real View argues that the dialog box is a means by which a user operates the program and nothing more. While the dialog box at issue is partially the means by which a user operates 20-20 Design (including "Save..." and "Print..." buttons), it is also partially a source of information. As such, this dialog box is entitled to protection as a compilation of factual information (based on unique selection and arrangement) and as part of the compilation relating to the graphical user interface or screen display.

#### **k. Items 49 & 50**

20-20 seeks to protect two means by which a user may resize windows and doors. First, a user can right-click on a window or door and then select "Resize Width" from a menu that appears.

Second, a user can right-click on a window or door and then select "Attributes" from a menu that appears. The user can then modify the dimensions of the door from the Attributes menu.

Both of these represent the means by which a user operates 20-20 Design, and therefore they both constitute methods of operation unprotectable under Lotus.

**1. Item 54**

20-20 seeks copyright protection for its "options" for editing countertops. When a user right-clicks a corner of the countertop, a menu appears that contains commands including "Add Bevel," "Notch," and "Rotate." (20-20 Ex. 3, 60.) When a user right-clicks on a line, a menu appears that contains commands including, "Extrude," "Intersect," and "Add Point." (Id.) These menus provide the means by which a user operates 20-20 Design; they are analogous to the menu command hierarchy in Lotus and are unprotectable as methods of operation.

**4. Other Elements**

I now turn to other elements that are not methods of operation under Lotus.

**a. Item 7: Main Window Subdivided into Plan View and Elevation View**

20-20 seeks to protect its idea of bifurcating the work area into an "elevation view" and a "floor plan view," with the elevation view work area situated atop the floor plan work area. (20-20 Ex. 3 at 10.) This aspect of 20-20 must be filtered out

on the basis of merger: there are basically only four ways to express this idea. Specifically, if the idea is to show a user both the elevation view and the floor plan view simultaneously within the work space, then you could either divide the work space in half along its vertical axis or divide the work space in half along its horizontal axis. Once the work space has been divided, the elevation view will occupy one half and the floor plan the other. The expression and the idea are simply too close to warrant copyright protection.

**b. Item 9: use of tabs to provide multiple views of the same design with limited visibility of items**

To the extent that 20-20 seeks to protect the use of tabs to provide various views of the same design, there seems to be no distinction between the idea and the expression. To put it another way, there is very little expression associated with the use of view tabs, which themselves are not protectable. (Tr. Day 1, 81:2-4 ("The notion that there are tabs . . . should be filtered out, we agree.")) This particular element of the software is almost entirely functional. There is simply not enough distance between the idea of using tabs to achieve a certain end, and the expression that follows, to result in copyright protection. See Altai, 982 F.2d at 705 ("[T]hose elements of a computer program that are necessarily incidental to its function are similarly unprotectable.").

**c. Item 29: The Placement Zone**

20-20 seeks to protect what it calls the "conception, execution, and appearance" of the "placement zone." 20-20 describes the "placement zone" as follows: "Once a wall is drawn in 20-20 Design, a "placement zone" automatically appears connected to the wall. The "placement zone" is displayed as a dotted line around the wall and assists the user by automatically aligning kitchen objects within the zone against the wall." (20-20 Br. 26.) In other words, if a user wants to add a cabinet to a kitchen design drawing, once the user drags the cabinet (on the screen) towards the wall, at some point the cabinet will enter the "placement zone," and if the user releases the cabinet within this zone, it will snap to the wall like a magnet. At the hearing, the parties spent a great deal of time describing the "snapping to the wall" aspect of the placement zone. The placement zone exists so that a designer can place a kitchen design element (cabinet, window, sink) on a wall as opposed to have it floating in space. Thus, when the user drags a kitchen design element close enough to the wall - into the placement zone - and releases the element, it will automatically align with the wall.

The Court must determine whether a placement zone with a snapping function is protectable as an expression of an idea or is, as Real View argues, a "method of operation." 20-20 claims that the "idea" of the placement zone is to "provide a default location for cabinets, etc." Professor Davis testified that the

expression of the placement zone "as a certain size and distance" around the walls and construction lines is protectable. (Tr. 1, 94:21-24 ("We're talking about a particular size, location, and orientation of a dotted line which means placement zone, and as a way of expressing the idea of a placement zone.").)

The "idea" or "concept" of a placement zone is not protectable. 17 U.S.C. 102(b) (denying copyright protection to any "idea" or "concept"). There is expression associated with the idea of a placement zone: the zone is visually represented by a boundary line that gives the zone a particular size and location. Professor Abbott conceded that the visual boundary line is unique. However, 20-20 states that the "idea" is the placement zone - a space within which objects "snap to" a wall - and therefore a boundary line is not just derivative of the idea, but it is necessarily incidental to the idea. The idea of having a placement zone like the one described above can only be represented in so many ways: the idea and the expression have merged. The boundary line of the placement zone must be filtered out under the Altai analysis. See Altai, 982 F.2d at 707 (court must filter out expression "dictated by considerations of efficiency, so as to be necessarily incidental to that idea"). Cf. Mitek, 864 F. Supp. at 1582 (finding merger where there was a "limited range of expression available to depict places.") It is true that "snapping" to the wall is not a necessary aspect of this idea, and it is undisputed that the "snapping" is original.

For example, the Planit program uses a cursor to locate the position of items. However, no matter how original, the "snapping" method of placement is a method of operation. See CMM Cable Rep, Inc. v. Ocean Coast Props., Inc., 97 F.3d 1504, 1519-20 ("It is axiomatic that copyright law denies protection . . . to forms of expression dictated solely at functional considerations . . . .") (internal punctuation and citation omitted); Incredible Techs., Inc. v. Virtual Techs., Inc., 400 F.3d 1007, 1012 (7th Cir. 2005) ("[F]unctional elements are also excluded from copyright protection."). Neither the idea of the placement zone nor any expression associated with it is protectable.

**d. Items 51 & 52: automatically adding countertops to all base cabinets, and automatically adding overhangs on all four sides of items not placed on a wall**

20-20 seeks to protect the expression resulting from the idea of its program automatically adding countertops to all base cabinets and automatically adding overhangs to all four sides of items not placed on a wall. (20-20 Ex. 3, 57.) There are a limited number of ways to represent an item having a countertop, or an item having a countertop that overhangs the item on all four sides. The doctrine of merger precludes 20-20 from securing copyright protection for either of these ideas.

**e. Item 53: the use of a rectangular countertop shape called "User Shape" that can be placed on the floor or elevation plan and modified**

Since neither party briefed item 53, it is difficult to determine what exactly 20-20 seeks to protect. To the extent that 20-20 seeks to protect the expression associated with the idea of having a countertop with a customizable shape, that possibility is foreclosed on the grounds of merger.

**f. Item 55: bill of materials**

20-20 seeks to protect the "presentation and nomenclature" of its Bill of Materials. (20-20 Ex. 3, 62.) The doctrines of blank forms, titles, and scenes a faire preclude copyright protection for this feature of 20-20 Design. As early as Baker v. Selden, the Supreme Court held that "blank accountbooks are not the subject of copyright." 101 U.S. 99 at 107. That principle has been codified in regulations to deny copyrightability to "[b]lank forms, such as time cards, graph paper, account books, diaries, bank checks, scorecards, address books, report forms, order forms and the like, which are designed for recording information and do not in themselves convey information," and "lists or tables taken from public documents or other common sources." 37 C.F.R. § 202.1(c), (d). The Bill of Materials is simply a spreadsheet or grid that lists the items selected for use in a design, including the quantity, catalog, user code, description, and price. (Davis Aff. 54.) Most if not all of the information contained in those columns comes from public documents or common sources and is not original to 20-20.

The table does not represent copyrightable subject matter.

Words and short phrases such as titles and names are not copyrightable. 37 C.F.R. § 202.1(a). Thus, 20-20's attempt to protect its nomenclature, which apparently refers to the phrases "Plan Items" and "Non-Plan Items" (see Davis Aff. 54) falls short.

**g. Item 57: Styles and Pricing and Global Options**

Here again, 20-20 appears to seek protection for a dialog box that contains purely factual information and presents that information in a table form. While the compilation of information in the dialog box may be protectable, the table itself is unprotectable expression under Baker v. Seldin.

**h. Item 58: Wording in Legend**

When 20-20 Design produces a floor plan, it prints out a legend. (Davis Aff. 57.) From left to right, this legend contains a note about dimensions, a logo, an intellectual property claim, and the dates on which the plan was designed and printed. The text of the note about dimensions is taken verbatim from the National Kitchen and Bath Association ("NKBA") legend. (Real View App. 65.) 20-20 cannot therefore assert copyright protection over that part of the legend, despite accidentally omitting one word of the NKBA version. However, the intellectual property note appears to be original to 20-20, and although basic, may be entitled to copyright protection. See, e.g., Am.

Dental Ass'n v. Delta Dental Plans Ass'n, 126 F.3d 977, 979 (7th Cir. 1997) (holding numbers, short descriptions, and long descriptions in taxonomy classifying dental procedures copyrightable).

**I. Items 59-61: ProKitchen 2.2's Help menu**

Finally, 20-20 points to ProKitchen 2.2's Help menu in an apparent effort to suggest that the Help menu is probative of copying. However, 20-20 fails to articulate what of its own creative expression is being copied. Therefore, it is entirely unnecessary at this stage of the litigation to consider items fifty-nine through sixty-one since they relate not to copyrightability but instead only to copying.

/s/ Patti B. Saris

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PATTI B. SARIS  
United States District Judge